

## **Chapter 2**      Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

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Chapter 2 describes the existing affected environment for the Interstate 5 (I-5) High-Occupancy Vehicle (HOV) Lane Extension Project Build Alternatives. The affected environment is the base condition on which environmental effects of the alternatives are evaluated in this Initial Study/Environmental Assessment (IS/EA).

The sections in Chapter 2 include the regulatory setting applicable to the environmental topic, the methodology of impact analysis, a description of the affected environment, environmental effects resulting from the I-5 HOV Lane Extension Project Build and No Build Alternatives, and measures to avoid, minimize, or mitigate adverse impacts of the Build Alternatives. Photographs, graphic exhibits, and data matrices are included throughout Chapter 2 where applicable to support the impact analyses.

The National Environmental Policy Act (NEPA) uses the terms “impact,” “effect,” and “consequences” synonymously. For an action to affect the environment, it must have a causal relationship with the environment. NEPA distinguishes three types of causal impacts: direct, indirect, and cumulative. “Cumulative impact” is defined and the contribution of the Build Alternatives to cumulative effects is analyzed in Section 2.21 of this IS/EA. Direct and indirect effects are defined below and analyzed in Sections 2.1 through 2.22 of this IS/EA.

- Direct effects are caused by the action and occur at the same time and place (40 Code of Federal Regulations [CFR] 1508.8).
- Indirect effects are caused by the action and occur later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, as well as related effects on air, water, and other natural systems, including ecosystems (40 CFR 1508.8).

As part of the environmental analysis conducted for the project, the following environmental resources were considered, but no potential for adverse impacts to

these resources was identified. Consequently, there is no further discussion regarding these resources identified in this IS/EA.

- **Farmlands and Timberlands:** There are no timberlands or prime, unique, or soils of local significance for farmlands within the general study area.
- **Coastal Zone:** The proposed project is located outside of the Coastal Zone and is not anticipated to have any effects on coastal resources. Therefore, it would not impact coastal resources, and no further discussion is necessary.
- **Mineral Resources:** There are no mineral resources located within or adjacent to the proposed project; therefore, no further discussion is necessary.
- **Section 4(f) Resources:** 23 CFR 771.135 states that, “The Administration (FHWA) may not approve the use of land from a significant publicly owned public park, recreation area, or wildlife and waterfowl refuge, or any significant historic site unless a determination is made that there are no feasible and prudent alternative to the use of land from the property; and the action includes all possible planning to minimize harm to the property resulting from such use.” The proposed project site and vicinity does not include any significant publicly owned public parks, recreation areas, or wildlife and waterfowl refuges. Furthermore, Alternatives 2 and 4 would not require the use of land on any significant historic site; therefore, a Section 4(f) resource analysis is not required and is not included in this IS/EA. The proposed project will not substantially impair the activities, features, or attributes that would qualify San Geronio Park, Bonita Canyon Park, Verde Park, Sunset Park, Calle Paloma Parkette, and Descanso Park for protection under Section 4(f). Therefore, the requirements for Section 4(f) will not be triggered for these parks. Additionally, the trail segment of the San Juan Creek Trail located closest to the proposed project and the Pablo Pryor Adobe/Hide House are located outside the right-of-way and temporary disturbance limits, and there will be no direct use of this land. Therefore, the requirements for section 4(f) will not be triggered for these resources. A more detailed discussion of the treatment of resources with the easement owned by San Clemente High School is provided below.

San Clemente High School is a public school that is located slightly within the project footprint of Alternatives 2 and 4 under Design Option B. The area that will be acquired for the proposed Build Alternatives with Design Option B is

outside the existing fence on the school property and is not in any area currently designated or used for recreation purposes. In addition, the recreational facilities at San Clemente High School are not available for general public use.<sup>1</sup> Because the land area anticipated to be acquired is not currently used or designated for recreation purposes, it is not considered a use under Section 4(f) as defined in 23 CFR 774.17. No temporary construction easements within the school property boundary will be needed during construction of Alternatives 2 and 4 with their design options. Therefore, Alternatives 2 and 4 with their design options will not result in the permanent or temporary use of any land designated for recreation uses from San Clemente High School. Additionally, the Build Alternatives will not modify access to the school, result in substantive changes in views from the school, or result in noise impacts to the school. Therefore, Alternatives 2 and 4 and their design options will not result in proximity impacts that would substantially impair the activities, features, or attributes that would qualify the areas designated for recreation uses on the school property for protection under Section 4(f).

- **Wild and Scenic Rivers:** There are no rivers listed in the National Inventory of Wild and Scenic Rivers located near the project study area.
- **Energy:** When balancing energy used during construction and operation against energy saved by relieving congestion and other transportation inefficiencies, the project would not have a significant energy impact.

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<sup>1</sup> Personal telephone conversation with Jon Hamro, Athletics Director at San Clemente High School, on November 5, 2010.

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